5(2), 3(5)

AUTHORS: Zhirov, K. K., Ivanova, G. F. SOV/7-59-6-5/17

TITLE: On the Rhenium Distribution in Molybdenites From Deposits of a Series of Genetic Types

PERIODICAL: Geokhimiya, 1959, Nr 6, pp 518 - 523 (USSR)

ABSTRACT: The rhenium content of molybdenite was colorimetrically determined in 19 samples according to the method of reference 5 (Table 1). The samples came from various deposits of Central Kazakhstan, i.e. Kara-Oba, Akchatau, Airshoko, Dal'nenskoye. These deposits belong to the cassiterite - wolframite - molybdenite-type (high-temperature type). Four samples came from Shalgiya, a deposit belonging to the molybdenite - pyrite-type (transition from high- to medium-temperature formations). The rhenium contents in molybdenite of high-temperature deposits are between 1.0 and $5.8.10^{-4}$ % Re, $3.0.10^{-4}$ % Re on an average. The Shalgiya deposit of the medium-temperature range exhibits rhenium contents of between 22 and 39.10^{-4} %, i. e. 32.10^{-4} % Re on an average. A comparison with the rhenium contents of other deposits formed at higher or lower temperature (skarn- and molybdenite - chalcopyrite type respectively), on table 2, shows increasing contents at decreasing formation temperature

Card 1/2

according to a certain rule from 10^{-4} % to 10^{-2} % Re. The comparative values are taken from a paper by S. M. Basitova (Ref 3). The authors thank A. N. Stroganov and V. A. Zolotareva for assisting them in their work. A paper by Z. V. Stodenikova is mentioned. There are 2 tables and 5 Soviet references.

ASSOCIATION: Kafedra geokhimii Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova (Chair of Geochemistry of Moscow State University imeni M. V. Lomonosov)

SUBMITTED: August 19, 1959

ZHIROV, K.K.

[redacted]

Transition of zircon into the metamict state. Doklady Akad. Nauk S.S.S.R. 85, 889-91 '52. (MLRA5:8)
(CA 47 no.17:8595 '53)

ZHIROV, K. K., tr.

Isotopes in geology; collection of articles
Per. s angliiskogo i nemetskogo
Moskva, Izd-vo inostrannoi lit-ry, 1954. 640 p. (55-44391)

QE515.T7

ZHIROV, K.K.; KURBATOV, V.V.

X-ray measurement study of the suitability of monazites for determining the geological age. Biul.Kom.po opr.abs.vozr.geol.form.no.1:53-56 '55.
(MIRA 9:10)

1. Radiyevyy institut imeni V.G. Khlopina AN SSSR.
(Monazite) (Geological time) (X rays)

ZHIROV, K.K.

ZHIROV, K. K.

Zhirov, K. K. - The Age of the Akchatau Rare Metal Intrusion According to Data Obtained by the Helium Method for Monazites.

The Sixth Session of the Committee for Determining the Absolute Age of Geologic Formations at the Department of Geologic-Geographical Sciences (OGGN) of the USSR Academy of Sciences at Sverdlovsk in May 1957.

Izv. Ak Nauk SSSR, Ser. Geol., No. 1, 1958, p. 115-117 author Pokrovskaya, T. B.

ZHIROV, K.K.; ZYKOV, S.I.; ZHIROVA, V.V.; STUPNIKOVA, N.I.

The effect of hydrothermal changes on the radioactive mineral age determination. Geokhimiia no.8:657-665 '57. (MIRA 11:2)

1. Kafedra geokhimii geologicheskogo fakul'teta Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova i Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo AN SSSR, Moskva. (Nuclear geophysics)

ZHIROV, K.K.; STISHOV, S.M.

Geochemistry of the amazonitization process. Geokhimiia no.1:32-42 Ja '65.

(MIRA 18:4)

1. Kafedra geokhimii Moskovskogo gosudarstvennogo universiteta.

ZHIROV, K.K.

Characteristics of the variation of the isotopic composition
of lead in the deposits of certain regions. Dokl. AN SSSR
158 no.1:126-129 S-O '64
(MIRA 17:8)

1. Predstavleno akademikom D.I. Shcherbakovym.

ZHIROV, K.K.; URUSOVA, M.A.

Geochemistry of alkalies in granites of the Taraka Massif in the Yenisey Ridge. Geokhimiia no.2:105-115 '62. (MIRA 15:3)

1. Department of Geochemistry of the Lomonosov State University, Moscow.

(Yenisey Ridge--Granites) (Yenisey Ridge--Alkalies)

ZHIROV, K.K.; URUSOV, V.S.

Evaluation of analyses of leads of similar isotopic composition. Dokl. AN SSSR 143 no.6:1432-1434 Ap '62. (MIRA 15:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya. Predstavleno akademikom D.I.Shcherbakovym.
(Lead--Isotopes) (Chemistry, Analytic)

S/007/62/000/006/002/002
B107/B101

AUTHORS: Zhirov, K. K., Shestakov, G. I., Ivanov, I. B.

TITLE: Letter to the Editor

PERIODICAL: Geokhimiya, no. 6, 1962, 546

TEXT: In amplification of a previous paper (Geokhimiya, no. 1, 1961) the authors state that in the case of simultaneous loss of Pb and U(Th) from a mineral the total effect must be calculable from the equation: $Pb/U = \exp(\lambda t) - 1 - \left[(1-n)/(1-m)\right] \left[(\exp(\lambda t) - \exp(\lambda T)\right]$, whence an expression for Pb^{207}/Pb^{206} can be derived. If the loss factors for lead and uranium (thorium) are equal (i. e., with $n = m$) this becomes $Pb/U = \exp(\lambda T) - 1$. These conclusions and the related diagrams in the above-mentioned paper can be used only to compare two minerals, one without loss of lead and the other without loss of uranium (thorium).

Card 1/1

ZHIROV, K.K.; SHESTAKOV, G.I.; IVANOV, I.B.

Interpretation of age figures obtained by the lead method. Geokhimiia no.1:49-55 '61. (MIRA 14:3)

1. Institute of Geochemistry Siberian department of the Academy of Sciences, U.S.S.R.

(Lead—Isotopes)
(Geological time)

S/007/61/000/011/003/003
B107/B147

AUTHORS: Zhirov, K. K., Bandurkin, G. A., Lavrent'yev, Yu. G.

TITLE: Geochemistry of rare-earth elements in pegmatites of Severnaya Kareliya

PERIODICAL: Geokhimiya, no. 11, 1961, 995 - 1004

TEXT: This paper presents data on the composition of rare earths in 41 samples of orthite, monazite, xenotime, uraninite, gummite, cyrtolite, and garnet; furthermore, it deals with the influence of paragenesis and alteration of a mineral on the composition of rare earths. The samples were taken from pegmatites of the Belomorskiy archaic metamorphic complex, Severnaya Kareliya. According to K. A. Shurkin (Ref. 9: Tr. Lab. geologii dokembriya, Izd-vo AN SSSR, no. 9, 1960), this complex consists of the following formations: 1) lower formation: leucocratic biotite gneisses and granite gneisses, strongly metamorphized; 2) intermediate formation: amphibole, amphibole-biotite, and biotite gneisses, amphibolites; 3) upper formation: Disthene-garnet-biotite and garnet-biotite gneisses. The following previous publications on the composition of rare earths in

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S/007/61/000/011/003/003
B107/B147

Geochemistry of rare-earth elements ...

minerals of Kareliya are referred to: S. A. Borovik (Ref. 10: Dokl. AN SSSR, Ser. nov. 14, 351, 1937); V. N. Protopopov (Ref. 11: Materialy TsNIGRI, Geokhimiya. sb. 5, 30, 1940); E. Ye. Vaynshteyn, A. I. Tugarinov, N. V. Turanskaya (Ref. 12: Geokhimiya 2, 36, 1956); Ye. I. Semenov, R. L. Barinskiy (Ref. 13: Geokhimiya, No. 4, 1958); V. A. Leonova (Ref. 14: Zap. Vses. mineralog. ob-va 88, No. 1, 1959); and D. A. Mineyev (Ref. 15: Geokhimiya, No. 2, 1960). I. B. Ivanov, Ye. V. Kostetskaya, and Ye. V. Bibikova took part in collecting samples for this study. The analysis of rare earths was carried out at the radiochemical laboratory of the Institut mineralogii, geokhimii i kristallokhimii redkikh elementov (Institute of Mineralogy, Geochemistry, and Crystallochemistry of Rare Elements) by the method of R. L. Barinskiy (Ref. 16: Zavodsk. laboratoriya 24, 613, 1958). The sensitivity for the individual elements is 0.1 %; the accuracy for monazite, xenotime, orthite is 7 - 10 %, and for uraninite and gummite, 20 %. The values for odd-numbered elements are semiquantitative in the latter. Determination was carried out without previous enrichment. Some yttrium determinations were carried out at the radiochemical laboratory of the Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii (Institute of Geology of Mineral Deposits, ✓

Card 2/4

Petrography and Geochemistry): focusing spectrometer of the type РСК-4 (RSK-4), sensitivity 0.05%, accuracy 10%. The authors thank R. L. Barinskiy and K. I. Narbutt for the permission to work in their laboratories and for help. Result (see Table 2): The composition of rare earths in monazite and xenotime is virtually independent of paragenesis. It varies, however, considerably in orthite and uraninite. Rare earths are precipitated in the following sequence: apatite, orthite, monazite, (xenotime+cyrtolite+uraninite), carburan. In pegmatites with this sequence, first yttrium oxides are fixed in apatite (Ye. V. Kostetskaya, Ref. 23: Raspredeleniye redkikh zemel' v apatitakh nekotorykh pegmatitovykh zhil Sev. Karelii. (Distribution of rare earths in the apatites of some pegmatite veins in Severnaya Kareliya). Kafedra geokhimii Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova (Department of Geochemistry of Moscow State University imeni M. V. Lomonosov), 1958); then, the cerium earths are precipitated in orthite and monazite, and, finally, yttrium oxides in xenotime and in the other minerals mentioned. Uraninites have a Gd - Dy - Er maximum. In pegmatites without apatite, orthites are enriched with yttrium oxides. Uraninites have a Dy - Er - Yb maximum. Accordingly, the composition depends on the presence of phos-

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Geochemistry of rare-earth elements ... S/007/61/000/011/003/003
B107/B147

phate ions. In this connection it is assumed that rare earths are transported as pyrophosphate complex. The authors thank V. D. Nikitin, P. P. Borovikov, and Yu. V. Nikitin for help in field work and material selection. There are 3 figures, 2 tables, and 32 references: 27 Soviet and 5 non-Soviet. The three most recent references to English-language publications read as follows: E. W. Heinrich, R. A. Borup, A. A. Levinson. Geochim. et Cosmochim. Acta, 19, No. 3, 1960; M. K. Carron, C. R. Naeser, H. J. Rose, F. A. Hildebrand. U. S. Geol. Sur. Bull., No. 1036 - N, 1958; C. Frondel. Am. Miner. 41, 7 - 8, 539, 1956.

ASSOCIATION: Kafedra geokhimii Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova (Department of Geochemistry of Moscow State University imeni M. V. Lomonosov). Institut geokhimii Sibirskogo otdeleniya AN SSSR (Institute of Geochemistry of the Siberian Department of the AS USSR)

SUBMITTED: April 1, 1961

Card 4/4

✓

ZHIROV, K.K.; ZYKOV, S.I.

Isotopic composition of lead in some deposits of central Kazakhstan [with summary in English]. Geokhimiia no.1:76-81 '59. (MIRA 12:2)

1. Department of Geochemistry, M.V. Lomonosov Moscow State University.
(Kazakhstan--Lead--Isotopes)

ZHIROV, K.K.; BARANOVSKAYA, N.V.; LITVINA, L.A.

Determining the absolute geological age of monazites by the helium method [with summary in English]. Geokhimiia no.2:167-171 '58. (MIRA 12:4)

1. V.G. Khlopin Radium Institute, Academy of Sciences, U.S.S.R., Leningrad.
(Geological time) (Monazite) (Helium)

3(8)
AUTHORS: Zhirov, K. K., Chernyshev, I. V. SOV/7-59-2-4/14

TITLE: On the Geochemistry of Lead in Devonian Effusive Rocks of Central Kazakhstan (K geokhimii svintsa v devonskikh effuzivakh Tsentral'nogo Kazakhstana)

PERIODICAL: Geokhimiya, 1959, Nr 2, pp 116-123 (USSR)

ABSTRACT: 79 samples from the Terekty, Kuzhal, Munglu districts and the region along the river Kara-Say were investigated. The quartz spectrograph ISP-28 was used for the analyses. The methods employed (Ref 7) were originally developed for zircons and were adapted to be used for lead in this case. Several chemical analyses were carried out for checking purposes by the authors and L. I. Pavlenko, Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy AS USSR) (Table 1). The average lead content of Devonian effusives in the regions investigated is $1.2 \cdot 10^{-3}$% and thus below the Clark degrees for the relevant types of rock (Tables 3 and 4). No enrichment due to more acid rocks was found; the lead content in the Terekty district is somewhat higher. A few samples of tuffs of liparite composition

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SOV/7-59-2-4/14

On the Geochemistry of Lead in Devonian Effusive Rocks of Central Kazakhstan

(Fig 1) have a higher lead content than the respective lava (Fig 2). This enrichment is assumed to be secondary. L. I. Blokhina, M. A. Petrova, N. I. Stupnikova, and L. A. Borisenok participated in the investigations. There are 3 figures, 4 tables, and 13 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: June 26, 1958

Card 2/2

3(8), 3(0) SOV/7-59-1-10/14

AUTHORS: Zhirov, K. K., Zykov, S. I.

TITLE: On the Isotope Composition of Lead in Some Deposits of Central Kazakhstan (Ob izotopnom sostave svintsa nekotorykh mestorozhdeniy Tsentral'nogo Kazakhstana)

PERIODICAL: Geokhimiya, 1959, Nr 1, pp 76-81 (USSR)

ABSTRACT: The isotope conditions of lead in 17 samples of 15 deposits of Central Kazakhstan were determined (Table 1). Yu. A. Borshchevskiy and I. G. Ganeyev assisted in the taking of samples and also supplied some of them. The object of the analysis with the mass spectrometer MS-3 were the lead iodides and, in 3 samples, directly the galenite. Errors are less than 1%. The different deposits and geographical conditions, especially the Kuzhal deposit (Table 2) are discussed. It follows that the isotope composition in a series of samples from rare metal deposits agrees with those of manganese, and hydrothermal deposits. The polymetallic stage in deposits of rare metals is probably superposed and in genetic relation with ore-formation processes in lead-, lead-zinc-, and other deposits. Genetically related deposits and deposits situated relatively close to each other show differences in the isotope

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SOV/7-59-1-10/14

On the Isotope Composition of Lead in Some Deposits of Central Kazakhstan

composition. Most probably two generations of galenites exist in these regions. The authors appreciate the suggestions and help of A. A. Maksimov. There are 2 tables and 10 Soviet references.

ASSOCIATION: Kafedra geokhimii Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova
(Chair of Geochemistry, Moscow State University imeni M. V. Lomonosov)

SUBMITTED: March 13, 1958

Card 2/2

ZHIROV, N.F., doktor khimicheskikh nauk.

The unsolved problems of science. Tekh.mol. 24 no.10:22-24 O '56.
(MLRA 9:11)

(Atlantis)

ZHIROV, Nikolay Feodos'yevich; KUMKES, S.N., redaktor; NOGINA, N.I.,
tekhnicheskiy redaktor

[Atlantis] Atlantida. Moskva, Gos. izd-vo geogr. lit-ry,
1957. 118 p. (MLRA 10:5)
(Atlantis)

ACC NR: AP6030907 SOURCE CODE: UR/0209/66/000/009/0028/0029

AUTHOR: Zhirov, S. (Engineer; Lieutenant colonel)

ORG: none

TITLE: "False" triggering of thermal indicator

SOURCE: Aviatsiya i kosmonavtika, no. 9, 1966, 28-29

TOPIC TAGS: aircraft engine, aircraft fire CONTROL equipment, aircraft engine instrument, temperature instrument/AM-3 aircraft engine, RD-3M aircraft engine

ABSTRACT: It has been observed that at times a false fire signal had been triggered in the AM-3 (or RD-3M) aircraft engine section. After a close study engineers I. Barkovskiy and N. Yegorov discovered that the air temperature in the engine section is closely related to the level of engine operation. When 3900 rpm are reached, if there is a flaw, hot gases may enter the section: then the thermal indicator shows its maximum (+170°C) and flashes the fire alarm signal. Thus it has been established that the system in addition to fire alarm signaling can also serve as a device to warn of the presence of hot gases in the engine. Orig. art. has: 2 figures.

SUB CODE: 21, 01/ SUBM DATE: none

Card 1/1

YEMEL'YANOV, Yu.V.; MALINOVSKIY, G., master sporta; STROKOV, V., podvodnik-lyubitel'; PANTELEYEV, Yu., master sporta, admiral; ZHIROV, V., zasluzhennyy trener SSSR, master sporta, chempion Sovetskogo Soyuza po vodnomotornomu sportu

Deep waters for small boats! Tekh. mol. 31 no.6:26-29 '63.
(MIRA 16:7)

1. Predsedatel' Federatsii vodnomotornogo sporta (for Yemel'yanov). 2. Predsedatel' Komiteta vodnolyzhnomu sportu (for Malinovskiy).

(Motorboats) (Aquatic sports)

Zhirov, V. I.

PHASE I BOOK EXPLOITATION SOV/1297

Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheniy v narodnom khozyaystve i nauke, Moscow, 1957

Polucheniye izotopov. Moshchnyye gamma-ustanovki. Radiometriya i dozimetriya; trudy konferentsii... (Isotope Production. High-energy Gamma-Radiation Facilities. Radiometry and Dosimetry; Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science) Moscow, Izd-vo AN SSSR, 1958. 293 p. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR; Glavnoye upravleniye po ispol'zovaniyu atomnoy energii SSSR.

Editorial Board: Frolov, Yu.S. (Resp. Ed.), Zhavoronkov, N.M. (Deputy Resp. Ed.), Aglintsev, K.K., Alekseyev, B.A., Bochkarev, V.V., Leshchinskiy, N.I., Malkov, T.P., Sinitsyn, V.I., and Popova, G.L. (Secretary); Tech. Ed.: Novichkov, N.D.

PURPOSE: This collection is published for scientists, technologists, persons engaged in medicine or medical research, and others concerned with the production and/or use of radioactive and stable isotopes and radiation.

COVERAGE: Thirty-eight reports are included in this collection under three main subject divisions: 1) production of isotopes 2) high-energy gamma-radiation facilities, and 3) radiometry and dosimetry.

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Babushkin, A.V., I.V. Voznesenskaya, N.G. Zhirov, V.I. Zatulovskiy and Yu.L. Khmel'nitskiy. Laboratory Employing Cobalt Emitters 189

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Card 9/12

ZHIROV, V.I.

Twist drills with ground heels. Stan.i instr. 25 no.2:24-26 F '54.
(MLRA 7:5)
(Drilling and boring machinery)

ZHIKOV, V. I.

Drilling and Boring

Wider introduction of high speed drilling. Vest mash., 32, No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

ZHIROV, V. I.

USSR/Miscellaneous - Industrial tools

Card 1/1 Pub. 103 - 8/23

Authors : Zhirov, V. I.

Title : Drill bits with resharpened bulkhead

Periodical : Stan. i instr. 2, 24-26, Feb 1954

Abstract : Experiments showed that drill bits with sharpened bulkheads reduce the axial forces with respect to the diameter of the drill bit and the machined material. The wear resistance of such bits was found to be 2-3 times higher in comparison with bits of ordinary geometry. A method of sharpening drill bits is described. Table; graphs; drawing.

Institution : .....

Submitted : .....

ZHIROV, V., master sporta

The SI-175 cm^3-class three-point speedboat. Za rul. 17 no.9:9
S '59. (MIRA 13:1)
(Motorboats)

ZHIROV, Ye.G.

Spontaneous disturbances of mitosis in the roots of the apomictic form of Poa alpina L. Izv. SO AN SSSR no.4. Ser. biol.-med.nauk no.1:137-139 '65. (MIRA 18:8)

1. Biologicheskiy institut Sibirskogo otdeleniya AN SSSR, Novosibirsk.

DYATLOVA, N.M.; TEMKINA, V.Ya.; BFLUGIN, Yu.F.; LAVROVA, O.Yu.; BERTINA, L.E.; IOZEFOVICH, F.D.; KALMYKOVA, N.N.; ZHIROV, Yo.P.

Complex formation of β-hydroxyethyliminodiacetic acid with rare-earth elements. Zhur. neorg. khim. 10 no.5:1131-1137 My '65. (MIRA 18:6)

KORPUSOV, G.V.; YESKEVICH, I.V.; ZHIROV, Ye.P.

Group separation of rare earth elements by the countercurrent extraction method. Ekstr.;teor.,prim.,app. no.1;125-1[illegible]2 '62. (MIRA 15:11)

(Rare earths)
(Extraction (Chemistry))

FRUNZE, T.M.; KORSHAK, V.V.; v vypolnenii eksperimental'noy raboty
prinimali uchastiye; KRASNYANSKAYA, E.A.; MAKARKIN, V.A.;
ZHIROVA, L.V.

Heterochain polyamides. Part 12: Isomorphism of polymers in the polyamide group. Vysokom.soed. 1 no.2:287-292 F '59.
(MIRA 12:10)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Amides) (Polymers)

3

L 53047-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG
ACCESSION NR: AP5012970

UR/0078/65/010/005/1131/1137
546.65:541.49+661.163/.858.7

AUTHOR: Dyatlova, N. M.; Temkina, V. Ya.; Belugin, Yu. F.; Lavrova, O. Yu.; Bertina, L. E.; Iozefovich, F. D.; Kalmykova, N. N.; Zhirov, Ye. P. 20 6

TITLE: Complexing of beta-hydroxyethyliminodiacetic acid with rare earth elements

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 5, 1965, 1131-1137 27

TOPIC TAGS: beta-hydroxyethyliminodiacetic acid, rare earth complex formation, dysprosium separation, yttrium separation, rare earth element, complex compound

ABSTRACT: The authors studied the capacity of β-hydroxyethyliminodiacetic acid to form complexes with rare earth elements, determined the composition of the complexes formed, and calculated the instability constants of the latter and the dissociation constants of the complexing agent. Such quantitative characteristics of complex-forming processes facilitate the determination of optimum conditions of separation and purification of rare earth elements. The appreciable differences between the instability constants of the complexes show that this complexing agent can be used for the separation of rare earth metals. The difference in the pK of

Card 1/2

L 53047-65

ACCESSION NR: AP5012970

0

the complexes of dysprosium and yttrium, equal to 0.71, is particularly notable, since it exceeds any previous value attained with other complexing agents. Experiments involving the separation of a binary mixture containing 30% Y_2O_3 and 70% Dy_2O_3 by means of β-hydroxyethyliminodiacetic acid were very successful. It was found that as the atomic number of the rare earth metal increases, the stability of the complexes rises sharply at first (from lanthanum to europium), then remains approximately constant (from europium to lutetium). Orig. art. has: 8 figures, 2 tables, and 11 formulas.

ASSOCIATION: none

SUBMITTED: 16Sep63 ENCL: 00 SUB CODE: IC, GC

NO REF SOV: 001 OTHER: 011

Bd-B

Card 2/2

S/830/62/000/001/006/012
E111/E192

AUTHORS: Korpusov, G.V., Yeskevich, I.V., and Zhirov, Ye.P.

TITLE: Group separation of rare-earth elements by the method of counter-current extraction

SOURCE: Ekstraktsiya; teoriya, primeneniye, apparatura. Ed. by A.P. Zefirov and M.M. Senyavin. Moscow, Gosatomizdat, 1962. 125-142

TEXT: This work deals with the preliminary separation of the rare earths into sub-groups by the counter-current extraction method. Various representative rare-earth concentrates were used. Purified commercial tri-butyl phosphate solvent was used. A horizontal glass extraction apparatus of the mixer-settler type, with maximum throughput of 6 litres/hour per phase, was used. Distribution of the rare-earth elements was determined with the aid of radioactive isotopes and their content by X-ray and spectrophotographic methods. The group separation of the rare-earth elements can be effected in 7-9 M nitric acid; the separation of concentrates rich in the cerium sub-group elements being the simplest, since the distribution coefficients change little with

Card 1/3

element concentration. Determination of the coefficients for this acidity for elements in neodymium concentrate at equilibrium concentration at 9, 20 and 25 °C showed that: 1) distribution-coefficient values for all the elements studied differ little from those for trace amounts of these elements; 2) the degree of separation of Nd and Sm (viz 2.8) is good enough for separation in a few stages; 3) the distribution coefficients increase with falling temperature, but the change over fluctuations from 15 to 20 °C is not sufficient to disturb the prevailing conditions. The scheme devised on the basis of these results for separating cerium-rich concentrates into sub-groups between Nd and Sm gave, for each stage, complete separation into the two sub-groups with approximately 90-95% theoretical efficiency. Similarly good results were obtained with a neodymium concentrate. In these experiments the feed was introduced half way along the apparatus, through which tributyl phosphate and the nitric acid wash solution were circulating in counter-current. In calculating process conditions for separating into sub-groups yttrium-earth rich concentrates, allowances must be made for the changes in distribution coefficients with concentration. The system tested gave satisfactory separation at Gd: with a concentrate containing 11% La, 12.5 Ce, 1.6 Pr, 5 Nd, 1.4 Sm, - Eu, 7.5 Gd, 1.4 Tb, 8.7 Dy, 1.3 Ho, 2.4 Er, 0.15 Tu, 1.1 Yb, 0.5 Lu, 45 Y, the aqueous phase contained only 25% La, 48.9 Ce, 3 Pr, 12 Nd, 4.5 Sm, 8 Gd and 0.8 Tb; while the organic phase contained only 1% Gd, 0.85 Tb, 8.7 Dy, 2.3 Ho, 4.4 Er, 0.6 Tu, 2.2 Yg, 0.25 Lu and 79.4 Y.

There are 7 figures and 4 tables.

5 (2)

AUTHORS: Senyavin, M. M., Zhirov, Ye. P. SOV/32-25-8-7/44

TITLE: On the Choice of Conditions of the Chromatographic Separation of Mixtures

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 8, pp 914 - 916 (USSR)

ABSTRACT: When conducting ion exchange chromatography the following are of primary importance: determination of the optimum relation between the diameter of the filter (D) and the height of the sorbent layer (1), and the most favorable flow velocity of the solution (VS). To settle the first problem chromatographic washing-out experiments were conducted for ytterbium from columns with 5 different (D). The measurements were made with Yb^{175} (Table). An increase of the (D) or a decrease of the ratio 1 : D worsened the degree of chromatographic separation (CS). It was established that this observation cannot be explained by the so-called "wall effect". The influence of the (VS) was investigated on the cation exchanger with Na-, Co-, and Yb-ions (using Na^{24}, Co^{60}, and Yb^{175}). (VS) of 0.35, 0.70, and 1.05 ml/minute were used. It was established that the (CS)

Card 1/2

On the Choice of Conditions of the Chromatographic Separation of Mixtures SOV/32-25-8-7/44

decreases with an increase of the (VS) in space (ratio of the quantity of liquid to the quantity of sorbent per time unit) and at given (VS) in space with the decrease of the linear (VS). Therefore, possibly long and narrow columns should be used (caused by the resistance of the sorbent layer). There are 3 figures and 1 table.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii Akademii nauk SSSR (Institute of Geochemistry and Analytical Chemistry of the Academy of Sciences, USSR)

Card 2/2

SADYKHOV, I.D.; ZHIROVA, L.F.; VAVILOVA, S.S.

Spectrophotometric determination of divinyl in the contact gas of butylene dehydrogenation process. Azerb.khim.zhur. no.4:75-79 '65.
(MIRA 18:12)

1. Nauchno-issledovatel'skiy i proyektnyy institut po kompleksnoy avtomatizatsii proizvodstvennykh protsessov v neftyanoy i khimicheskoy promyshlennosti. Submitted April 20, 1964.

AKHMEDLI, M.K.; GRANOVSKAYA, P.B.; ZHIROVA, L.F.

Photometric detection of magnesium in alunite rocks. Uch.zap.AGU no.3:27-33 '55. (MLRA 9:12)

(Magnesium) (Alunite) (Photometry)

ZHIROVA, L.F.

AKHMEDLI, M.K.; GASHIMOVA, T.E ; ZHIROVA, L.F.

Color reactions for qualitative detection of nickel and cobalt by grinding and determination of the sensitivity of the reactions. Uch.zap.AGU no.3:17-26 '56. (MLRA 10:4)
(Colorimetry) (Nickel) (Cobalt)

LAPIN, Yu.A.; ZHIROVA, L.G.; VESELOV, A.Ya.

Treatment of acute and suppurative inflammations of the female pelvis minor with tetracycline hydrochloride. Antibiotiki 7 no.4:362-366 Ap '62. (MIRA 15:3)

1. Mediko-sanitarnaya chast' Leninogorsksvinetsstroya Vostochno-Kazakhstanskoy oblasti (glavnyy vrach A.Ya. Stremousova).

(PELVIS—DISEASES)
(TETRACYCLINE)

L 08193-67 EWT(m)/EWP(w)/EWP(t)/ETI IJP(c) JD/JG
ACC NR: AP6030502 (A) SOURCE CODE: UR/0149/66/000/004/0117/0120

AUTHOR: Lovin, A. M.; Zhorova, L. P.; Elmanovich, V. N.

47

ORG: Moscow Institute for Steel and Alloys, Department of the Metallurgy of Nonferrous, Rare, and Radioactive Metals (Rekomendovana kafedroy metallovedeniya tsvetnykh, redkikh i radioaktivnykh metallov Moscovskogo instituta stali i splavov)

41

B

TITLE: Effect of alloying elements on the electric resistance of a tantalum-niobium alloy

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 4, 1966, 117-120

TOPIC TAGS: electric resistance, tantalum containing alloy, niobium containing alloy

ABSTRACT: The choice of a tantalum-niobium alloy was dictated by the fact that these metals have a resistance at 20° about 2.5 times greater than that of tungsten and molybdenum, and that they recrystallize without an increase in brittleness, since the solubility of gases in them is greater. In addition, tantalum and niobium have better industrial properties than tungsten and molybdenum; the ductility of a tantalum base alloy remains high with the introduction of any desired amount of niobium. A tantalum alloy with from 30 to 35% niobium has been found experimentally to have the highest specific resistance of any binary alloy of the Ta-Nb system. The electric resistance of this alloy at 20° is 20 microohm-cm, and at 1500°, 90 microohm-cm. Alloying

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UDC: 669.018.54

L 08193-67

ACC NR: AP6030502

16 6

elements were Mo, Re, V, Zr, and Ti, that is, metals which form solid solutions with tantalum and niobium. The alloying elements were added to the base alloy in the following amounts: 1-10% Re; 2-5% Mo; 2-10% V; 5-20% Zr; and 5-20% Ti. It was found that addition of molybdenum,27 rhenium,17 and vanadium 27 in amounts corresponding to the chosen upper limits leads to a marked increase in brittleness. 16 Experiments were carried out on the electric resistance of alloys containing rhenium, molybdenum, vanadium, and titanium. It was found that the highest specific resistance at 1500° was exhibited by an alloy containing 4% Re, and 3.5% V (105-110 microohm-cm). The overall conclusion is that these alloys show promise for use as heating elements in electric vacuum equipment. Orig. art. has: 4 figures and 1 table.

SUB CODE: 11/ SUBM DATE: 25Feb65/ ORIG REF: 001/ OTH REF: 001

electrical resistance alloys 15

ACC NR: AR6023353

SOURCE CODE: UR/0271/66/000/004/B009/B009

AUTHOR: Zhirova, L. P.

TITLE: Basic principles for the construction of a polynomial interpretation system (POLIS)

SOURCE: Ref. zh. Avtomat telemekh i vychisl tekhn, Abs. 4B71

REF SOURCE: Tr. Sibirsk. fiz.-tekhn. in-ta pri Tomskom un-te, vyp. 47, 1965, 11-14

TOPIC TAGS: computer programming, polynomial

TRANSLATION: A polynomial interpreting system (POLIS) is a programming program which carries out analytic operations on polynomials and is made up of a class of polynomials of degree $n = 0,1,2$, written in the form

$$P(x, y) = \sum_{0}^{k} a_l(x) y^l, \quad a_l(x) = \sum_{0}^{m} c_{lj} x^j, \quad P(x, y) = \underbrace{\sum_{0}^{k} y^l \sum_{0}^{m}}_{} c_{lj} x^j.$$

Using a special unit, the polynomial is reduced to the form

$$P(x, y) = \sum_{0}^{k} a_l(y) x^l, \quad P(x, y) = \sum_{0}^{k} x^l \sum_{0}^{m_l} c_{lj} y^j.$$

The coefficients of all polynomials (both input and output) are registered in one lot,

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UDC: 681.142.2

ACC NR: AR6023353

the coefficient lot; and information about them is registered in the information lot. The programmer solving a problem using the POLIS system need be concerned only with the addresses of the information of intermediate and output polynomials. Their coefficients are automatically distributed in the lot of coefficients, and information about their location and the degree of the polynomial are recorded by POLIS at the address indicated by the programmer in the commands to POLIS. The program is made to be applicable to triple address computers and is fixed in the operative memory in cells 0020-1200. 1 figure. Yu. U.

SUB CODE: ~~13~~ 09,12

L 08591-67 EWT(d)/EWP(1) IJP(c)

ACC NR: AR6029278 SOURCE CODE: UR/0044/66/000/006/V051/V052

AUTHOR: Zhirova, L. P.

34
B

TITLE: Basic principles for the formation of the POLIS system

SOURCE: Ref. zh. Matematika, Abs. 6V348

REF SOURCE: Tr. Sibirsk. fiz.-tekhn. in-ta pri Tomskom un-te, vyp. 47, 1965, 11-14

TOPIC TAGS: computer programming, automatic computer programming, polynomial

ABSTRACT: The polynomial interpreting system (POLIS) is a programming routine for performing analytical operations on polynomials. It belongs to a class of polynomials with dimensions n = 0,1,2, of the form

$$P(x, y)=\sum_{0}^{k} a_i(x)\, y^i, \quad a_i(x)=\sum_{0}^{m} c_{ij} x^j,$$

$$P(x, y)=\sum_{0}^{k} y^i \sum_{0}^{m} c_{ij} x^j.$$

This polynomial may be reduced to the following form with the aid of a special unit:

Card 1/2 UDC: 681.142.002.5:51

ACC NR: AR6029278

$$P_1(x, y) = \sum_0^k a_i(y) x^i, \quad P(x, y) \sum_0^k x^i \sum_0^{m_i} c_{ij} y^j.$$

The values of coefficients of the original and resultant polynomials are stored as a group coefficient storage group, and the information relating to these coefficients is stored in the information storage group. During the solution of a problem using the POLIS routine, the programmer must only concern himself with the addresses relating to the intermediate and resultant polynomials. Their coefficients are automatically arranged in the coefficient storage group, and the location data for these coefficients and the degree of the polynomial are entered into addresses by the POLIS route. These addresses are specified by the programmer in the POLIS call-in instruction. The program is written for a three-address computer. It occupies the storage locations from 0020 to 1200 in the main memory. [Translation of abstract] Yu. U.

SUB CODE: 09

FRUNZE, T.M.; KORSHAK, V.V.; v provedenii eksperimental'noy raboty prinimala uchastiye; Zhirova, L.V.

Heterochain polyamides. Part 13: Mixed polyamides containing sulphur atoms in the main chain. Vysokom.soed. 1 no.2:293-300 F '59.
(MIRA 12:10)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Amides)

3(5)

SOV/7-59-6-11/17

AUTHORS: Tugarinov, A. I., Zykov, S. I., Zhirova, V. V., Knorre, K. G.

TITLE: On the Age of the Oldest Rocks of the Antarctic Continent

PERIODICAL: Geokhimiya, 1959, Nr 6, pp 555 - 556 (USSR)

ABSTRACT: The Soviet sector of the Antarctic continent contains rocks which, according to geological investigations, belong to the Archeozoic time. Ye. I. Chervov, collaborator of the Antarkticheskaya ekspeditsiya (Antarctic Expedition) placed specimens of orthite, biotite, and muscovite at the authors' disposal for the purpose of age determination. The specimens were taken from the pegmatite veins which penetrate through gneisses and iron quartzites in the area of Mirnyy. The investigation of orthite rendered the following results:
Pb^{206}/U^{238} 1190 million years old, Pb^{208}/Th^{232} 1350 million years old, (Pb^{207}/U^{235} 800 million years old). The content of radiogenic Pb^{207} is very low. The most favorable results are to be expected with the two first ratios. According to the K/Ar-method the age of mica was the following: biotite 1330 million years old, muscovite 1280 million years old. Magmatic activity

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On the Age of the Oldest Rocks of the Antarctic Continent SOV/7-59-6-11/17

in this area is, therefore, 1300 ± 100 million years old. This corresponds to the conditions on the neighboring continents: Isa Mine (Isa Mayn), Australia, 1190 million years, Kagadi, Africa, 1370 million years. There are 2 tables and 1 American reference.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR, Moskva (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy of the AS USSR, Moscow)

SUBMITTED: April 17, 1959

Card 2/2

COUNTRY :GDR

D

CATEGORY :Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR. : RZKhim., No. 21 1959, No. 74525

AUTHOR :Vinogradov, A. P., Tugarinov, A. Zh., Zhirova, V.V.*

INST. :Not given

TITLE :On the Age of Granite and Ore Occurrences in Saxony

ORIG. PUB. :Freiberger Forschungsh, 1959, C, No 57, 73-85

ABSTRACT :The authors have analyzed 15 samples of metamorphic rocks and granites from Saxony and from Czechoslovakia. The following composition ranges were observed: Ar,(4.2-9.32)·10^{-5} in rocks and (8-11.6)·10^{-5} cm^3/gm (from 8 samples) in micas; K, 2.72-5.59 and 5.3-9.9%, respectively; age by the Ar-method, 200-630 and 280(?)-380 million years. The uranium pitch [sic] of various generations contained 53.3-70.3% U and 0.104-2.68% Pb. The isotope composition of Pb in the oldest uranium

CARD: 1/4 *Zybov, S. A., Knorre, K. G., and Lebedev, V. I.

72

COUNTRY : GDR
CATEGORY : D

ABS. JOUR. : RZKhim., No. 21 1959, No. 74525

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : ore (3 samples) was found to be: Pb 204 0.44, 0.42, 0.594; Pb 206 73.89, 73.70, 65.22; Pb 207 9.85, 9.87, 11.84; Pb 208 15.78, 15.01, 72.35; estimated age (from the ratios Pb 207/Pb 206, Pb 206/U 238, Pb 207/U 235) 180 million years. Two other samples showed Pb 204 0.7 and 1.00, Pb 206 60.08 and 86.96, Pb 207 13.10 and 21.75, Pb 208 26.12 and 37.47, respectively; age 100 and 5 million years. The Pb from galenite deposits in Saxony and in Thuringia (8 samples) was found

CARD: 2/4

COUNTRY : GDR D

CATEGORY :

ABS. JOUR. : RZKhim., No. 21 1959, No. 74525

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : to have the isotope composition: Pb 206/Pb 204 17.72-18.3; Pb 207/Pb 204 15.19-15.37; Pb 208/Pb 204 36.77-37.45. The authors conclude that Saxony has been the scene of at least three intrusive cycles 360-380, 300-320, and about 200 million years ago. The ore deposits in Saxony have been subjected to hydrothermal metamorphism at least twice; this has led to the regeneration of the ores during the Cretaceous Period (about 100 million years ago) and in the Upper-Tertiary

CARD: 3/4

73

COUNTRY : GDR
CATEGORY : D

ABS. JOUR. : RZKhim., No. 21 1959, No. 74525

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : Period (about 5 million years ago). The authors are of the opinion that the Devonian-Carboniferous Period on the geologic time scale should be modified by moving the Carboniferous Period downwards and the Permian-Triassic Period to 'younger' times.

R. Khmel'nitskiy

CARD: 4/4

ZHIROVA, V.V.

3(5)

AUTHORS: Baranov, V. I., Knorre, K. G. SOV/7-59-6-14/17

TITLE: Chronicle. The VIII Session of the Commission for the Determination of the Absolute Age of Geological Formations (at the Otdeleniye Geologo-geograficheskikh nauk AN SSSR (Department of Geological-geographical Sciences AS USSR), May 18 - 22, 1959, Moscow)

PERIODICAL: Geokhimiya, 1959, Nr 6, pp 562 - 563 (USSR)

ABSTRACT: The 8th regular session of the (Commission on the Determination of the Absolute Age of Geological Formations) was held in Moscow from May 18 to May 22, 1959 at the Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy). A series of summarizing reports was held on age determinations in the most important parts of the USSR, which are to be presented to the 21st International Geological Congress. The following reports are concerned:

A. V. Polkanov, E. K. Gerling: Problems of the absolute age of the Precambrian of the Baltic Shield.

A. P. Vinogradov, L. V. Komlev, A. I. Tugarinov: The absolute age of the Ukrainian crystalline shield.

Card 1/4

F. F. Semenenko, Ye. B. Burkser, and N. F. Ivantishin: Age groups of the mineralization of the rocks of the Ukraine in their absolute age.

A. P. Vinogradov, A. I. Tugarinov, K. G. Knorre, and Ye. V. Bibikova, V. V. Zhirova, S. I. Zykov: The age of the Precambrian rocks of the crystalline fundament of the Russian Platform.

I. Ye. Starik, A. Ya. Krylov, M. S. Ravich, Yu. I. Silin: The absolute age of the rocks of the eastern part of the Antarctic continent.

A. Ya. Krylov: The absolute age of the rocks of the Tsentral'nyy Tyan' Shan' and the employment of the argon method for metamorphous and sedimentary rocks.

G. D. Afanas'yev: Results of the geochrony formations of the Caucasus.

L. P. Ovchinnikov and M. A. Garris: Age of the geological formations of the Urals and the Priural'ye (Cis-Urals).

N. I. Poleva and G. A. Murina, G. A. Kazakov: Absolute age determination of the sedimentary and volcanic formations.

Card 2/4

L. F. Krasnyy and N. I. Poleva: Absolute age of the magmatic rocks of the (Soviet) Far East.

L. V. Komlev: Absolute age of the granite intrusions of Kazakhstan.

The research work of a number of laboratories, RIAN, GEOKhI, LAGED, [illegible], UFAN, etc aroused great attention, especially a report of E. K. Gerling, Yu. A. Shukolyukov on the concentration of the isotope Ar^{38} in uranium minerals as well as the comprehensive research work carried out by the vozrastnaya laboratoriya Akademiya nauk Gruzinskoy SSR (Laboratory of Age Determination of the Academy of Sciences of the Gruzinskaya SSR) under the application of isotopic dilution and flame photometry. The determination of the age of sedimentary rocks was discussed; A. Ya. Krylov proved in his report how well radiogenic argon is conserved in destroyed products of rocks such as boulders, sands, sandstones, clays, and muds. A. I. Tugarinov and S. I. Zykov were the first to attempt to determine the absolute age of sedimentary carbonate formations according to isotopic composition of lead.

Card 3/4

ZHIROVA, V. V.

ZHIROV, K.K.; ZYKOV, S.I.; ZHIROVA, V.V.; STUPNIKOVA, N.I.

The effect of hydrothermal changes on the radioactive mineral age determination. Geokhimija no.8:657-665 '57. (MIRA 11:2)

1.Kafedra geokhimii geologicheskogo fakul'teta Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova i Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo AN SSSR, Moskva.
(Nuclear geophysics)

ZHIROVA, V. V.

ZHIROVA, V. V.,

Zhirova, V. V., Zykov, S. I., Tugarinov, A. I. - The Suitability of Several Radioactive Minerals for the Age Determination.

The Sixth Session of the Committee for Determining the Absolute Age of Geologic Formations at the Department of Geologic- Geographical Sciences (OGGN) of the USSR Academy of Sciences at Sverdlovsk in May 1957.

Izv. Ak Nauk SSSR, Ser. Geol., No. 1, 1958, p. 115-117 author Pekarskaya, T. B.

ZHIROVA, V.V.

ZHIROVA, V.V.; ZYKOV, S.I.; TUGARINOV, A.I.

Age of pegmatites of the Slyudyanka region [with summary in English]. Geokhimiia no.7:592-599 '57. (MIRA 11:1)

1. Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo AN SSSR, Moskva.

(Slyudyanka region--Pegmatites)
(Nuclear geophysics)

ZHIROVA, V.V.; ZYKOV, S.I.; TUGARINOV, A.I.

Age of zircons of ancient formations in the Kola Peninsula.
Geokhimiia no.12:1043-1052 '61. (MIRA 15:3)

1. Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences U.S.S.R., Moscow.
(Kola Peninsula—Zircon) (Kola Peninsula—Geological time)

STARIK, I.Ye.; BARANOVSKAYA, N.V.~~; ZHIROVA, V.V.;~~ KRYLOV, A.Ya.

Determining the age of magnetites by the helium method. Biul. Kom.po opr.abs.vozr.geol.form. no.4:151-159 '61. (MIRA 15:1)

(Geological time)
(Magnetites)

S/007/62/000/006/001/002
B107/B101

AUTHOR: Zhirova, V. V.

TITLE: Determination of the lead content in the standard samples G-1 and W-1 and in rocks with low concentration of lead by oscillographic polarography

PERIODICAL: Geokhimiya, no. 6, 1962, 542-544

TEXT: The lead content was directly determined after sample dissolution of the rock sample in hydrofluoric acid and concentrated sulfuric acid. After fuming off, twice distilled water and nitric acid were added, making the concentration not more than 0.5 N HNO_3. When the concentration of iron in the rock exceeded 3%, it was extracted with amyl acetate. Check tests with radioactive tracers proved that this process did not extract the lead, the concentration of which was then determined using a novel oscillographic polarograph ЦЛА (TsLA), model 01) with a sensitivity of 0.02 µg of Pb per ml of solution. The content of lead in the reagents was determined by blank tests. The following kinds of

Card 1/2

rock were examined (lead content in $10^{-4}\%$ enclosed in parentheses): granite G-1 (45.4); basalt W-1 (7.55); dolerite no. 1 from the Karoo formation (1.55); dunite no. 2 from China (2.15). Errors in determination: ±5% at concentrations above $10^{-3}\%$, and ±15% at $1\cdot10^{-3} - 5\cdot10^{-4}\%$. The values obtained for G-1 and W-1 agree well with data of R. Marshall and D. Hess (Analytical Chemistry 32, N 8, 961, 1960), and also with those of J. Carmichael and Alison McDonald (Geochim. et Cosmochim. Acta 22, nos. 2-4, 87, 1961). The work was done in the laboratory of Academician A. P. Vinogradov, who is thanked for discussion. There are 2 tables.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy of the Academy of Sciences USSR) Moscow

SUBMITTED: February 9, 1962

Card 2/2

ZHIROVA, V.V.

Determination of lead content in the basic rocks of the Pacific volcanic belt using the method of oscillographic polarography. Geokhimiia no.3:360-365 Mr '65. (MIRA 18:7)

1. V.I.Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences of the U.S.S.R., Moscow.

ZHIROVSKIY, Yu.

Conference of Kirghizistan food industry workers. NTO no.5:59
My '59.
(MIRA 12:8)

1.Zamestitel' predsedatelya byuro sektsii promyshlennykh i produvol'stvennykh tovarov Kirgizskogo respublikanskogo pravleniya nauchno-tekhnicheskogo obshchestva pishchevoy promyshlennosti.
(Kirghizistan--Food industry--Congresses)

ZHIRUKHIN, A.S., bul'dozerist

D-259 bulldozer. Mekh. stroi. 21 no.1:24 Ja '64. (MIRA 17:4)

1. Petrozavodskiy Promstroytrest.

GORBOVITSKAYA, R.M., uchitel'nitsa khimii; LIMONNIKOVA, A.I., uchitel'nitsa khimii; ZHIRYAKHINA, G.V., uchitel'nitsa khimii; ORLOVA, K.P., uchitel'nitsa khimii; CHERKEYEVA, P.I., uchitel'nitsa khimii; TSVETKOVA, L.T., uchitel'nitsa khimii; PLATOVA, V.M., uchitel'nitsa khimii; KOTLOV, V.N., uchitel' khimii

Our comments. Khim.v shkole 15 no.1:54-56 Ja-F '60.
(MIRA 13:5)

1. Srednyaya shkola No.626 Kirovskogo rayona Moskvy (for Gorbovitskaya). 2. Srednyaya shkola No.518 Kirovskogo rayona Moskvy (for Limonnikova). 3. Srednyaya shkola No.526 Kirovskogo rayona Moskvy (for Zhiryakhina). 4. Srednyaya shkola No.525 Kirovskogo rayona Moskvy (for Orlova). 5. Srednyaya shkola No.514 Kirovskogo rayona Moskvy (for Cherkeyeva). 6. Srednyaya shkola No.528 Kirovskogo rayona Moskvy (for TSvetkova). 7. Srednyaya shkola No.527 Kirovskogo rayona Moskvy (for Platova). 8. Srednyaya shkola No.627 Kirovskogo rayona Moskvy (for Kotlov).
(Moscow--Chemistry--Study and teaching)

ZHIRYAKOV, B.M.; PROTSENKO, Ye.D.; SEMENOV, V.F.

Two types of radiospectroscopes for paramagnetic resonance.
Nek. vop. inzh. fiz. no.1:62-65 '57. (MIRA 12:5)
(Microwave spectroscopy)

ZHIRYAKOV, B.M.; PROTSENKO, Ye.D.; SEMENOV, V.F.

Radiospectroscope with high-frequency modulation of the magnetic field for observing electronic paramagnetic resonance. Nek. vop. eksp. fiz. no.1:37-44 '59. (MIRA 13:2)
(Radiofrequency spectroscopy) (Paramagnetic resonance and relaxation)

ALEKSAKOV, G.N.; ZHIRYAKOV, B.M.; PROTSENKO, Ye.D.; SEMENOV, V.F.

Regulator of a magnetic field potential. Nek. vop. eksp. fiz.
no.1:53-62 '59. (MIRA 13:2)
(Magnetic fields)

ZHIRYAKOV, B.M.

2(1,8) PHASE I BOOK EXPLOITATION SOV/3247

Moscow. Inzhenerno-fizicheskiy institut

Nekotoryye voprosy eksperimental'noy fiziki, vyp. 1 (Some Problems in Experimental Physics, Nr 1) Moscow, 1959. 85 p. 3,000 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya SSSR.

Ed.: V.F. Semenov, Candidate of Physical and Mathematical Sciences, Docent; Tech. Ed.: R.A. Negrimovskaya.

PURPOSE: This book is intended for physicists, chemists and other persons interested in general problems of nuclear physics and physical and chemical analyses.

COVERAGE: The collection contains 10 articles dealing with problems in elementary particle acceleration, radiography and crystal structure, physical and chemical analysis and instrumentation in these fields. References and mention of personalities accompany each article.

Kirillov-Ugryumov, V.I. and Yu.M. Ivanov. Muon Beams With Energies up to 70 Mev Produced on an Accelerator 3

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ZHIRYAKOV, B.M.; LARKIN, A.I.

Imitator of the signals of nuclear magnetic resonance. Avtom.
i telem.; sbor. st. no.2:95-99 '62. (MIRA 15:9)
(Nuclear magnetic resonance and relaxation)
(Oscillators, Electron-tube)
(Electronic measurements)

ZHIRYAKOV, B.M.; LARKIN, A.I.; PROTASOV, Ye.A.

Study on permanent magnets. Zav. lab. 31 no.8:1022-1023 '65. (MIRA 18:9)

1. Moskovskiy inzhenerno-fizicheskiy institut.

ZHIRYAKOV, D. M.

Textile machinery

Results of introducing all-metal toothed belts. Tekst. prom., no. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. UNCLASSIFIED.

ZHIRYAKOV, D.M.

[redacted]

Determining uneveness of roves on a black board. Tekst.prom.14 no.3:51 Mr '54. (MLRA 7:5)

(Textile industry--Testing)

ZHIRYAKOV, D.M.

Industrial and technical council in industry. Tekst. prom. 17 no.8: 45-46 Ag '57. (MLRA 10:9)

1. Zaveduyushchiy laboratoriyey Kovrovskoy khlopchatobumazhnoy fabriki imeni Abel'mana.
(Textile industry) (Industrial management)

ZHIRYAKOV, D.M.

Experiment in modernizing carding machines by the IvNITI method. Tekst. prom. 19 no.6:92 Je '59. (MIRA 12:9)

1. Zaveduyushchiy laboratoriyey fabriki imeni Abel'mana. (Vladimirskiy sovnarkhoz).

(Carding machines)

ZHIRYAKOV, D.M.

Redesigning the drawing mechanism of the four-cylinder drawing frame for two-zone drafting operations. Tekst.prom. 21 no.2:64-65 Ja '61. (MIRA 14:3)

(Spinning machinery)

ZHIRYAKOV, D.M.

Efficiency of the use of rings of efficient geometry in connection with travelers having a lowered center of gravity. Tekst. prom. 24 no.5:22-23 My'64 (MIRA 18:2)

1. Zaveduyushchiy laboratoriyey fabriki imeni Abel'mana, g. Kovrov.

SOV/91-58-2-21/31

AUTHOR: Zhiryakov, D.V., Technician

TITLE: On the Use of Cables Having Rubber Insulation Within the Hose Coating (Ekspluatatsiya kabeley s rezinovoy izolyatsiyey v shlangovoy obolochke)

PERIODICAL: Energetik, 1958, Nr 2, p 30-33 (USSR)

ABSTRACT: The article contains recommendations to make the service life of hose cables longer. The advice given by the author is divided into the following paragraphs: a) how to correctly unwind the cable along the run; b) how to correctly remove the hose on spots where access to the unsulated wires is needed; c) shapes and causes of the hose damages (both cross and longitudinal fissures as well as loop-shaped inner twists of the wires are

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On the Use of Cables Having Rubber Insulation Within the Hose Coating

treated); d) how to process the cables to make them utterly cold- and bend resistant (five 360° bends of the cable in both directions are the test); e) how to avoid wire breaks; f) how to fasten the cable without deforming it or damaging the hose. There are 5 photos and 3 diagrams.

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ZHIRYAKOV, D.V., tekhnik.

Use of sheathed rubber-insulated cables. Energetik 6 no.2:30-33 F '58. (MIRA 11:1)

(Electric cables)

SOV/112-57-9-18300

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 9, p 22 (USSR)

AUTHOR: Zhiryakov, D. V.

TITLE: Tentative Manufacture of Rubber-Insulated Cables on the ANV-2 Machine (Opyt izgotovleniya shlangovykh kabeley na ANV-2)

PERIODICAL: Inform.-tekhn. sb. M-vo elektrotekhnich. prom-sti SSSR, 1956, Nr 10, pp 3-8

ABSTRACT: Described are the causes of defects and their prevention in manufacturing rubber sheathing of cables on a continuous-curing ANV-2 machine. Corrugations and undersize cable diameter are due to insufficient rubber feed caused by too close a distance between the mandrel and the matrix. A non-uniform heating of the head impairs the centering of rubber sheathing during manufacture. Increasing the rubber feed causes a uniform swelling of the cable if the core is not wound with calico, and causes a periodic thickening of the cable if the core is calico-wound. Individual bulges run 10-16 mm apart on a cable of 25 mm diameter. With an incorrectly set distributing ring, the bulges

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Tentative Manufacture of Rubber-Insulated Cables on the ANV-2 Machine

rise on one side of the cable. As a result of cable sagging in the pipe, imprints are observed on the cable surface along its entire length. Pipe contamination is the cause of periodic imprints with a pitch of 100-120 mm. A sudden deceleration of the paying-out reel causes a 5-6 mm thickening of cable 30-60 mm long. Upon a sudden increase of a rubber feed rate, the "necks" on the sheathing appear. Causes of rubber burning are considered, as well as rubber contamination of telescopic and vulcanization pipes. It is recommended that the homogeneity of rubber be checked during its preparation. With accelerators nonuniformly distributed in rubber, irreversible swellings are observed on the sheathing because of greater residual elongation of rubber in the places where the amount of accelerators is insufficient. Inhomogeneity in plasticity also affects cable diameter. ("Elektrokabel'" plant.)

L.A.O.

Card 2/2

ZHIRYAKOV, N.I.; LESYUK, B.Z.; RABINOVICH, B.V.; SOZAYEV, S.M.; FEYGIN, V.I.

Automatic control in the production of zinc. TSvet. met. 27 no.1: 30-41 Ja-F '54. (MIRA 10:9)
(Automatic control) (Zinc--Metallurgy)

ALIMOV, I.S., inzhener; BOGUSLAVSKIY, I.M., inzhener; ZHIRYAKOV, N.I., inzhener; FEYGIN, V.I., inzhener.

Equipment for preventing overheating. Priborostroenie no.7:28-30 Jl '57. (MIRA 10:9)

(Thermostat)

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SOV/112-59-2-3407

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 2, p 168 (USSR)

AUTHOR: Feygin, V. I., and Zhiryakov, N. I.

TITLE: Counting Relay Circuit for Automating Some Technological Processes (Schetnaya releynaya skhema dlya avtomatizatsii nekotorykh tekhnologicheskikh protsessov)

PERIODICAL: Sb. statey po energetike. M., Metallurgizdat, 1957, pp 302-309

ABSTRACT: A counting relay circuit intended for adding and subtracting electrical pulses is described. The counting unit comprises n counting relays, where n is the maximum value of the algebraic sum of pulses for which this circuit is designed. As the counting pulses enter the input unit, n counting relays equal to the number of incoming pulses are connected in series and remain in the circuit. For subtraction, a pulse is applied that switches off the last of the energized counting relays. The circuit can be used in various process-control systems. Two examples of practical application are described: (1) on an

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Counting Relay Circuit for Automating Some Technological Processes

automatic rolling mill for counting billets and signaling their maximum number on the intermediate table; (2) for automatic temperature control of a gas being cooled in a scrubber by water sprinkled from a number of injectors. Depending on the amount and initial gas temperature, the number of injectors in operation can be controlled.

L.P.Kh.

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SOV/137-59-12-26587

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 12, p 119 (USSR)

AUTHORS: Alimov, S.I., Zhiryakov, N.I., Feygin, V.I.

TITLE: An Automatic Programming Controller of the Heat Treating Process 18 for Tungsten and Molybdenum Rods

PERIODICAL: Sb. materialov po avtomatiz. proiz. protsessov i dispetcherizatsii, Nr 3, Moscow, 1958, pp 84 - 93

ABSTRACT: The regulator is intended for automatic current control according to the given program in welding W and Mo rods. A "D-33" type ampere-meter of the ferrodynamic system serves as a unit to measure the intensity of the welding current through the transformer. The program is set-up by shaped cams rotated by a synchronous motor. The basic part of the controlling device consists of the "MRShch-PR" (or ERM-47) electronic unit of the regulator; the inductive coils are fastened on the master device (zadatchik) and the foil flag-indicators which can enter into the gaps between the coils are fastened to the pointer. Relay coils are switched

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An Automatic Programming Controller of the Heat Treating Process for Tungsten and Molybdenum Rods

into the electron unit outlet; they control the reversible contactors of the potential-controller motor. The controller makes it possible for one operator to attend 8 - 12 welding machines; raising efficiency by a factor of two and ensuring the strict maintenance of the set-up conditions for heating-up the rods.

A.S.

Card 2/2

ZHIRYAKOV, N.I.

SOV/136-58-6-3/21

AUTHORS: Averbukh, M.A., Burnashev, A.A., Birger, G.I., Baysh, L.G., Zubkov, G.A., Zhiryakov, N.I., Isayev, D.V., Ovcharenko, Ye.Ya., Fromberg, A.B. and Shneyerov, M.S.

TITLE: New Means for Automatic Testing and Control in Non-ferrous Metallurgy (Novyye sredstva avtomaticheskogo kontrolya i regulirovaniya v tsvetnoy metallurgii)

PERIODICAL: Tsvetnyye Metally, 1958, Nr 6, pp 15 - 25 (USSR)

ABSTRACT: Many processes in non-ferrous metallurgy involve corrosive media and the Konstruktorskoye byuro (Design Bureau) Tsvetmetavtomatika (KB TsMA) have since 1955 been working on pneumatic control methods, which are especially suitable for such conditions. Other organisations named by the authors as some of those working in the same field are: Institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics of the Ac. Sc.USSR), NIITeplopribor, TsLA of the "Energochermet" Trust and the "Tizpribor" Works. A wide range (Table 1) is covered by the pneumatic transducers, produced by the KB TsMA (Figures 1 and 2) in which use is made of a corrosion-resistant Soviet plastic. A series of corrosion-resistant valves have also been produced (Table 2), including a diaphragm type with a position indicator

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